

SUPERFUND

Fact Sheet

ALDER MILL *Twisp, Washington*



U.S. ENVIRONMENTAL PROTECTION AGENCY

June 2003

Cleanup Update

Cleanup Reduces Exposure Risks

This spring, EPA and the Alder Gold & Copper Company, the mill owner, finished cleaning the mill buildings at the site and removed 1,000 cubic yards of contaminated materials from the mill pond. The pond is a shallow pit filled with process tailings, next to the Alder Mill buildings. The tailings and the dust inside the buildings contain high levels of heavy metals, including lead, arsenic, and cadmium.



A Vacuum Truck Cleans Up Alder Mill Contaminants

Workers continue to remove contaminated materials in and around the mill building. Last fall, a large vacuum truck, with filters that pick up and trap fine dust particles, was used to clean up the inside of the mill. This part of the cleanup greatly reduced exposure to airborne contaminants for people inside the building. The exterior cleanup reduced contaminants that can harm people and the environment.

Work completed to date:

- The mill building is considerably cleaner, and the risk from breathing in contaminants has been greatly reduced. However, there is still potential risk from touching contaminants.
- Thirty-five cubic yards of hazardous materials were removed from the site. These materials were taken to a permitted landfill.
- 1,000 cubic yards of contaminated materials were removed from the mill pond and taken to a permitted landfill.

Next Steps

EPA and the Alder Gold & Copper Company are working together to limit access to the mill building while we make a final decision about its future. The 1,000 cubic yards of contaminated materials remaining in the mill pond are scheduled to be removed in early summer. Later this year, sampling will determine whether the cleanup has successfully removed contaminants.

Site History

The Alder Mill site, outside Twisp, Washington, is an abandoned ore-concentrating mill for gold and copper. Two storage “ponds,” covering about 10 acres, were used between 1949 and 1952 to store wastewater and silt from the mill. Separate studies by the Washington State Department of Ecology and EPA found that surface soil at the mill site and mill ponds contains high levels of arsenic, lead, and other metals. The studies also show elevated naturally occurring arsenic in the area’s soil, rock, and water.

In 2001, the Okanogan County Health District, in cooperation with the Washington State Department of Ecology and EPA, found arsenic levels above 10 parts per billion (ppb) in six private drinking water wells near Twisp, Washington. Fifty-four wells and two springs were tested, finding arsenic ranging from below detection limits to more than 500 ppb. Nineteen private drinking water wells were found with arsenic levels above 10 ppb.

In 2002, the health district, EPA, and Ecology took samples and ran tests on drinking water wells, groundwater, and tailings to determine whether arsenic was present. The tests also studied the pathway the arsenic would follow if it were coming from the Alder mill. Some tests simulated groundwater flow, and showed that the mill pond arsenic is not very mobile. This indicates that heavy metals from the ponds are not likely to pose a significant threat to groundwater.

The investigation did not show a conclusive connection between arsenic in area wells and the Alder Mill site. However, it did find high arsenic levels upgradient and distant from the mill, where it would be unlikely for groundwater to travel from the mill site. Based on test results and the area’s arsenic-rich geology, EPA concluded that the arsenic in groundwater occurs naturally.



Cleaning up Alder Mill -- EPA and the Alder Gold & Copper Company in action.

For More Information

EPA Contacts:

For technical questions about the site, contact:

David Rees, On-Scene Coordinator
(206) 553-1808

rees.david@epa.gov

For information on how to become involved, contact:

Debra Sherbina

Community Involvement Coordinator
(206) 553-0247

sherbina.debra@epa.gov

You may also reach EPA through our toll free number: **1-800-424-4372**

County and State Contacts:

Doug Hale

Okanogan County Health District

(509) 422-7140, or toll-free (*within Okanogan County*): **1-800-222-6410**

Rick Roeder

Washington State Department of Ecology

(509) 454-7837

EPA's Internet web site:

<http://www.epa.gov/r10earth>

EPA's Alder Mill web site:

<http://yosemite.epa.gov/r10/cleanup.nsf/sites/alder>

You can review site documents:

The Administrative Record for the site (documents supporting EPA decisions) is available for your review at the Twist Community Center, 201 S. Methow Valley Highway. Phone: (509) 997-2926.

For people with disabilities: please call Debra Sherbina at 206-553-0247 (toll-free 1-800-424-4372) if you have special requests for reasonable accommodations. For TTY users: please call the Federal Relay Service at 1-800-877-8339 and give the operator Debra Sherbina's phone number.